



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

REQUEST FOR PROPOSALS

Brake and Tire Wear Exposure Concentrations in the South Coast Air Basin and Coachella Valley

P2024-09

South Coast Air Quality Management District (South Coast AQMD) requests proposals for the following purpose according to terms and conditions attached. In the preparation of this Request for Proposals (RFP) the words "Proposer," "Contractor," "Consultant," "Bidder" and "Firm" are used interchangeably.

PURPOSE

The purpose of this Request for Proposals (RFP) is to solicit bids to estimate brake wear particle (BWP) and tire and road wear particle (TRWP) exposure concentrations that can be used to estimate the health risks associated with BWP and TRWP throughout South Coast Air Basin and Coachella Valley in coordination with the Multiple Air Toxics Exposure 6 (MATES VI) study. Specifically, the study should result in estimated outdoor concentrations due to BWP and TRWP emissions from on-road vehicles and roadways at a 2 km grid over the South Coast Air Basin and the Coachella Valley during MATES VI. Several MATES studies have been conducted by South Coast AQMD since the 1980s, providing public information about air toxics and health risks, evaluating progress in reducing air toxics exposure, and providing direction to future toxics control programs. MATES VI will use comprehensive ambient measurements and regional modeling to estimate air toxic exposures and health risks. Non-exhaust mobile source emissions (NEE) are becoming a larger fraction of air toxics because exhaust and other emissions have decreased and are predicted to continue decreasing in the next decades. BWP and TRWP are an important component of NEE due to the association of these particles with cancer and non-cancer health risks. MATES VI will estimate BWP and TRWP exposure and health risks for the first time in a MATES campaign. The study will also assist South Coast AQMD staff in estimating BWP and TRWP exposure and health risks in future MATES studies to track trends.

The total funding for this contract will be up to \$850,000 for the fiscal years 2024-2025 through 2027-2028.

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SECTION I: BACKGROUND INFORMATION

The South Coast AQMD jurisdiction experiences some of the highest pollutant concentrations in the nation. Mountain ranges act as barriers to limit ventilation and persistent clear and calm conditions enhance photochemical reactions, contributing to high pollutant concentrations such as particle mass (PM, including PM_{2.5} and PM₁₀) and the highest ozone concentrations in the nation. Air toxic pollutant emissions are also high within the South Coast AQMD jurisdiction, with many emission sources including goods movement (one third of United States containerized cargo is moved through the jurisdiction), 10 million vehicles, and 28000 permitted stationary sources.

South Coast AQMD has studied air toxic pollution and the associated health risks to the 17 million residents living in the jurisdiction through the Multiple Air Toxics Exposure Study (MATES). Since the 1980s, five MATES studies have tracked progress in reducing air toxic exposures and health risks (<https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies>). MATES VI is currently being planned and will use comprehensive ambient measurements and regional modeling to estimate air toxic exposures and health risks, with a special focus on non-exhaust mobile source emissions (NEE) for the first time. As emissions from most sources decrease, NEE are becoming a larger fraction of air toxics, a trend that is predicted to continue in the next decades (see Figure 1). Some of the most important components of NEE due to the associated health risks are brake wear particles (BWP) and tire and road wear particles (TRWP). Thus, South Coast AQMD is requesting proposals to quantify BWP and TRWP exposure concentrations due to emissions from vehicles and roads in coordination with MATES VI. South Coast AQMD staff will use the exposure concentrations developed through this study to estimate health risks of BWP and TRWP exposure.

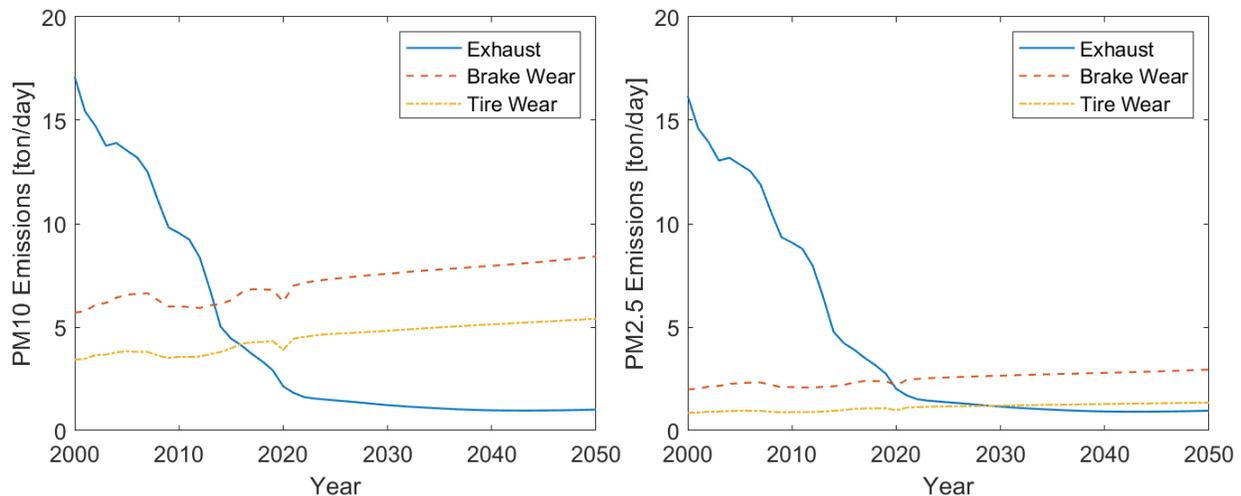


Figure 1: Trends of tire wear, brake wear, and exhaust PM10 emissions (left) and PM2.5 emissions (right) in South Coast AQMD from the Emission FACTor software (EMFAC) (<https://ww2.arb.ca.gov/our-work/programs/msei/on-road-emfac>)

It is important to note that when BWP and TRWP are emitted, some particles are dispersed into the neighborhood and some particles are deposited on the road surface and then resuspended due to turbulence caused by passing vehicles. Thus, the BWP and TRWP discussed in this RFP are the total combined direct and resuspended PM rather than only the directly emitted PM. This RFP does not require quantification of other parts of road dust that do not originate from BWP and TRWP. Because the processes of emission and resuspension are linked, it is useful to consider the vehicles and road together as the system used for analyzing emissions rather than the vehicle alone. The emissions of tire tread particles and road wear particles are caused by shear forces between the tire and road and so TRWP are internally mixed and thus it is useful to analyze the combined TRWP rather than tire tread and road wear separately. Road surfaces often use rubberized asphalt concrete (RAC), a road paving material made by blending ground-up recycled tires with asphalt to produce a binder which is then mixed with conventional aggregate materials (<https://dot.ca.gov/programs/maintenance/pavement/local-agencies/flexible-pavement>). Because of this, the separation between tire tread and road wear particles becomes even less clear, and analyzing the combined TRWP becomes even more useful.

MATES VI

MATES VI will include ambient concentration measurements and regional chemical transport modeling conducted by South Coast AQMD staff. See <https://www.aqmd.gov/mates6> for details about the planned studies. The measurements will cover approximately one year and are expected to begin in early 2025 (subject to change). Ten monitoring sites are planned with gaseous and PM10 speciation measurements at all sites, PM2.5 speciation at 6 sites, and Total Suspended Particle (TSP) speciation at 2 sites. Samples will be 24-hour integrated, with a 1 in 6 day schedule. Continuous measurements at several sites will include black carbon, ultrafine particle number, elements and metals, ammonia, and ethylene oxide. A complete list of planned measurements can be found in TAG Meeting #1 presentation available at <https://www.aqmd.gov/mates6>.

Regional photochemical modeling planned for MATES VI is similar to the modeling used in MATES V. For a description of this modeling, see the MATES V final report chapter 4 available at <https://www.aqmd.gov/mates5>. Briefly, MATES V used the latest available emissions data and the Comprehensive Air Quality Model with Extensions (CAMx) with RTRAC algorithm and Weather Research and Forecasting Model (WRF) for a 2 km grid over the South Coast Air Basin and portions of the Coachella Valley. The planned MATES VI modeling is subject to change, and more information will be available on the South Coast AQMD website and at future Technical Advisory Group meetings.

If needed for this study of BWP and TRWP, the measurements and modeling can be adapted to complement the proposed measurements, modeling, and analysis methods. However, this would need to be discussed with South Coast AQMD staff at one of the mandatory bidder's conferences or by submitting written questions and requests for support to the project officer. The proposer must obtain letter(s) of support prior to submitting the proposal (details of this requirement follow in the background information section below). The allowable support for sampling, measurements, modeling, and analysis may be limited due to cost and limitations of the MATES VI schedule.

BWP and TRWP Exposure Concentrations

Previous MATES studies have relied on modeled concentrations to estimate exposures throughout the South Coast Air Basin and Coachella Valley. Measurements provided independent ground-truth exposure estimates at several locations and were used to evaluate models. A limitation of the measurements is that they cannot easily identify sources contributing to the measured concentrations. For example, diesel exhaust particulate matter (DPM) cannot be directly measured from ambient samples. It is estimated in the exposure assessment due to its high cancer potency factor. Models must be used to determine DPM from measurements. BWP and TRWP pose a similar challenge; currently BWP and TRWP exposure concentrations can be calculated using chemical transport models that will be used by South Coast AQMD staff in MATES VI, but this calculation is associated with large uncertainty because emission rates and speciation profiles used in the models are uncertain.

A main source of BWP and TRWP is vehicles, including light duty and heavy-duty vehicles and electric vehicles. However other sources may contribute significantly to BWP and TRWP and associated risk in parts of the South Coast AQMD jurisdiction. For example, aircraft and runways could contribute significant TRWP emissions resulting in hotspots near airports. The focus of this RFP is the BWP and TRWP emitted from on-road vehicles and roads. However, the contractor should be aware that other significant sources of BWP and TRWP can interfere with measurements and the methods specified in the proposal should address how the measurements and analysis will be used to isolate the on-road vehicle and road contribution.

EMFAC 2021 updated light and heavy-duty brake emission factors based on data from California Air Resources Board (CARB) research contract 17RD016 and Caltrans research contract 65A0703, which used brake dynamometer testing. These studies resulted in significant changes to BWP emission factors. However, no emissions data was collected during on-road driving conditions. Tire wear emission factors in EMFAC

are based on data from over 20 years ago and may not represent emissions for modern vehicles (EMFAC 2014 Technical Documentation). Total resuspended dust emission factors are higher than brake and tire wear emission factors (Piscitello et al. 2021) and resuspended BWP and TRWP may contribute significantly to total emissions. CARB is currently studying brake and tire wear PM emissions using on-road measurements through research contract 22RD002, which will provide important data on brake and tire emissions during on-road driving conditions on real roads. The CARB research focuses on on-vehicle sampling and may not measure resuspended BWP and TRWP emission factors. Top-down studies of BWP and TRWP emissions and exposures, including measurements of total BWP and TRWP due to direct emissions and resuspension, are needed to complement CARB's research. Brake pad and tire composition varies widely between manufacturers and vehicle type (Harrison et al. 2021) and thus speciation profiles used in EMFAC may not adequately characterize toxic emissions; real-world measurements of BWP and TRWP speciation would improve estimates of BWP and TRWP exposure concentrations.

South Coast AQMD uses the latest approved EMFAC for on-road emission factors, and emission rates calculated based on AP-42 for resuspended dust and the latest available speciation profiles compiled by CARB to estimate emissions that are used in models of exposure estimates for MATES campaigns. Tire wear emissions in EMFAC have not been updated to account for changes in modern vehicle and road systems and both tire and brake wear emissions in EMFAC are based on bottom-up emission measurements; it would be preferable to develop BWP and TRWP emissions based on a top-down approach using real-world ambient measurements or to compare model predicted BWP and TRWP concentrations with real-world measurements before they are used in the MATES VI health risk assessment. A combined measurement and modeling approach would reduce uncertainties in predictions relative to using modeling alone.

This study will focus on a top-down approach based on real-world ambient sampling and measurements and regional modeling to estimate exposure concentrations of BWP and TRWP due to on-road vehicles and roads, as contrasted with bottom-up approaches which rely on testing of individual vehicles using dynamometers or instrumented vehicle measurements to determine emission factors. CARB has used and is currently conducting studies of BWP and TRWP emissions based on brake dynamometer and on-road instrument vehicles through research contracts 17RD016, 65A0703, and 22RD002. This study should not replicate the work conducted by those studies; rather this study should use ambient or near-road measurements to develop top-down emission estimates, and then use these emissions with regional modeling to estimate exposure concentrations.

BWP and TRWP emissions depend on several factors including the vehicle fleet (light duty vehicles, heavy duty vehicles, electric vehicles), traffic conditions including average speed and braking or acceleration activity, driving style, vehicle weight, road surface conditions and roughness, brake pad and tire composition, tire width, and ambient temperature, precipitation, and humidity (Harrison et al. 2021). This study should estimate exposures directly or estimate emissions, which are then used in regional

modeling to estimate exposure concentrations, that are representative of the on-road vehicles and roads present throughout the South Coast Air Basin and Coachella Valley. The study should develop a sampling and measurement schedule or test matrix as appropriate to obtain representative exposure estimates.

Several methods have been used to combine ambient measurements and models to estimate NEE concentrations or emission rates. These methods could be useful in evaluating parts of a chemical transport modeling framework of BWP and TRWP. Some examples of methods are listed below:

- Hicks et al. (2021) measured roadside increments in concentration and combined these with scaling factors estimated from brake dust and tire composition to calculate BWP, TWP, and resuspension. Then a CO₂ dilution approach and traffic measurements were used to calculate emission factors. Emission factors can be used to evaluate emission rates used in modeling.
- Shen et al. (2022) used PMF source apportionment of oxidative potential. They identified a vehicular exhaust, brake and tire wear, soil and road dust, and mixed secondary and marine factor. Source contributions can be used to evaluate model-estimated concentrations or oxidative potential.
- CARB research contract 18RD017 used chemical mass balance based on source profiles derived from laboratory samples. They estimated brake, tire, road dust, and several exhaust and secondary particle source contributions along with uncertainties. The source contributions can be used to evaluate modeled concentrations.
- Panko et al. (2019) used pyrolysis of PM samples to quantify tire tread PM from the formed dimer fragments. Tire tread mass was calculated based on an assumed polymer content of tire tread and then TRWP mass was calculated using the assumption that half of TRWP is tire tread and half is road wear.
- Straaten et al. (2023) used eddy covariance measurements of particle fluxes to estimate vehicle emission factors. Vogt et al. (2011) used a similar method along with CO₂ flux measurements to estimate exhaust emission factors. These types of methods could be used in combination to estimate exhaust and non-exhaust vehicle emission rates which can be used to evaluate emissions used in chemical transport models.
- Emission Analytics uses on-vehicle sampling of TRWP from near the tire and road interface along with chemical fingerprinting and a pyrolysis method to determine substances that are emitted from the worn tire tread (Emission Analytics 2023).

Other methods such as inverse modeling, vertical profile measurements combined with horizontal flux calculation, and tracer release or doping of tires/brake pads with tracer materials to identify them in ambient samples can also be useful to estimate BWP and TRWP.

It is anticipated that regional modeling will be used in MATES VI to estimate BWP and TRWP exposure concentrations at 2 km resolution throughout the South Coast Air Basin and Coachella Valley. For the MATES VI analysis, South Coast AQMD staff plans to use methods similar to those used for MATES V or the 2022 Air Quality Management Plan (AQMP). Details of those methods are available in the MATES V final report available at <https://www.aqmd.gov/mates5> and the 2022 AQMP available at <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>. Refer to Appendix V for details of the modeling approach employed for the 2022 AQMP.

BWP and TRWP in South Coast AQMD

Only a few estimates of BWP and TRWP have been made for the South Coast AQMD jurisdiction. One study using chemical mass balance (CARB research 18RD017) determined the following PM₁₀ concentrations downwind of roads from measurements at Anaheim and Long Beach during morning, mid-day, and evening, where errors are standard error of the mean:

Source	Anaheim (I-5 Near Road) [$\mu\text{g m}^{-3}$]	Long Beach (710 Near Road) [$\mu\text{g m}^{-3}$]
Road Dust	17.1±1.44	10.3±1.36
Brake Wear (two CMB profiles)	2.10±1.26 and 1.18±0.61	1.23±1.17 and 1.81±1.39
Tire Wear	2.01±1.10	1.84±1.56

The standard errors are relatively large, which is in part because only about 14-18 samples were collected at each site. 24-hour integrated samples with 1 in 6 day schedule for a year would have lower standard error but also likely lower average concentration due to lower PM concentrations at times of the day when there is less traffic. This also demonstrates that measurements targeted for rush hour or times when traffic is high can improve the measurement's ability to detect BWP and TRWP.

While this study represents an important advancement in the literature, the standard errors of the calculated averages from research study 18RD017 were too large to reliably use the measurements to evaluate models of BWP and TRWP exposure or to estimate exposure concentrations. Based on a desired uncertainty of less than 30% and the range of concentrations measured (1.8 – 3.3 $\mu\text{g m}^{-3}$), uncertainty of measurements of BWP and TRWP should be targeted to be less than about 0.5 to 1.0 $\mu\text{g m}^{-3}$ (uncertainty range of measurements, 95% confidence interval for annual averages, or other relevant metrics). Proposed work for task 3 of the statement of work should address how the methods can achieve this level of uncertainty.

Risk Assessment

South Coast AQMD staff have used Office of Environmental Health Hazard Assessment (OEHHA) risk assessment methods in past MATES studies to estimate cancer and non-cancer chronic health risks. See the MATES V final report available at <https://www.aqmd.gov/mates5>, the Air Toxics Hot Spots Program Risk Assessment

Guidelines available at <https://oehha.ca.gov/> and South Coast AQMD Risk Assessment Procedures available at <https://www.aqmd.gov/home/permits/risk-assessment> for details. This study addresses parts of the risk assessment process.

The risk assessment process consists of four parts: hazard identification, exposure assessment, dose response assessment, and risk characterization. Hazard identification involves determining whether a hazard exists, and, if so, if the substance of concern is a potential human carcinogen or is associated with other types of adverse health effects in humans. OEHHA conducts hazard identification for the AB 2588 Air Toxics Hot Spots program by listing substances that are addressed in Hot Spots program risk assessments. This list along with other data were used by South Coast AQMD for hazard identification as part of MATES V. However, OEHHA have not included BWP and TRWP in the Hot Spots program substance list, and OEHHA have not determined risk factors for BWP and TRWP or for many of the substances that are part of BWP and TRWP. This study will compile a list of substances that make up BWP and TRWP and identify those substances that are potential carcinogens or cause other chronic adverse health effects based on brake and tire manufacturer data, research data, government agency publications, or other data. This will help to inform measurements and other further actions targeting BWP and TRWP.

For MATES campaigns, exposure assessment involves estimating annual average concentrations at fixed monitoring sites using measured concentrations and throughout the South Coast Air Basin and the Coachella Valley using a chemical transport model. Previous MATES studies have not separately estimated exposure concentrations of BWP and TRWP through measurements or modeling, and thus this will be an important part of MATES VI and the study of BWP and TRWP. One of the tasks of this study is to estimate the annual average concentrations of PM₁₀ BWP and PM₁₀ TRWP at 2 km resolution throughout the South Coast Air Basin and the Coachella Valley. South Coast AQMD staff will use the concentration estimates to characterize the health risks of BWP and TRWP based on OEHHA published risk factors and methods. OEHHA risk assessment methods use total suspended particle mass for exposure estimates. However, PM₁₀ mass samples will be used for MATES VI, in part because PM₁₀ is inhalable and PM₁₀ mass drives the inhalation health risk. Therefore, this study should at a minimum estimate PM₁₀ BWP and TRWP exposures.

Dose response assessment characterizes the relationship between exposure to a substance and the incidence of an adverse health effect in an exposed population. South Coast AQMD has used cancer potency factors and reference exposure levels (RELs) developed by OEHHA to estimate risks in previous MATES studies. Cancer potency factors and RELs relevant for estimating risks from many substances that are part of BWP and TRWP have not been developed. Thus, a dose response assessment for BWP and TRWP or the substances that make up BWP and TRWP will be needed to determine the toxicity of these mixtures before they could be folded into a health risk assessment following OEHHA procedures. However, a dose response assessment requires epidemiological or other data that links exposure with health outcomes, and is not within the scope of this study.

Risk characterization combines exposure estimates with cancer potency factors and

RELs to determine the potential for health effects. Following OEHHA guidance, South Coast AQMD uses inhalation, soil ingestion, dermal absorption, homegrown produce, and mother's milk exposure pathways to estimate risk in MATES V. These pathways are generally important to consider for substances that deposit on the ground and thus can lead to non-inhalation exposure. For the MATES VI study of BWP and TRWP, South Coast AQMD staff will use the exposure estimates developed by the contractor to estimate health risks by all these exposure pathways.

South Coast AQMD Support

As allowed by the MATES measurement, modeling, and analysis plan, South Coast AQMD staff can support sampling, measurement, modeling, and analysis for this study. The proposer must obtain letter(s) of support prior to submitting the proposal in order to receive support from South Coast AQMD as described below. For information on the specific type of sampling, analytical methods, and measurements that South Coast AQMD plans to use for MATES VI see the MATES VI technical advisory meeting 1 presentation available on the South Coast AQMD website at <https://www.aqmd.gov/mates6> or the Sampling and Monitoring Capabilities section below. South Coast AQMD support can extend beyond what is currently planned for the MATES VI campaign and can be tailored to contractor needs and requirements as resources allow.

Sampling and Monitoring Capabilities

South Coast AQMD will conduct air monitoring at ten geographically dispersed monitoring stations, reflecting a representative distribution within the South Coast Air Basin and Coachella Valley. Numerous air toxic compounds will be measured using time-integrated and continuous methods to establish representative baseline regional-scale data for ambient air toxics concentrations. Staff plans to use methods similar to those used for MATES V and details can be found in the MATES V final report at <https://www.aqmd.gov/mates5>. The monitoring for MATES V and VI includes gaseous and PM speciation measurements based on time-integrated sample collection and analysis and complemented by continuous high time resolution instruments.

South Coast AQMD staff may be able to support limited sample collection, field instrument operation, space at existing air monitoring stations, and/or laboratory analysis associated with this proposal. If support is requested, it is desirable for the contractor to use measurement methods equivalent to those South Coast AQMD staff will use for MATES VI or provide training with a documented SOP in case other sampling, measurement and analytical methods will be employed.

Modeling Capabilities

South Coast AQMD staff will conduct regional photochemical modeling as part of MATES VI to estimate exposure concentrations for toxic air pollutants and to estimate cancer and chronic non-cancer risks. Staff plans to use methods similar to those used for MATES V or the 2022 AQMP. Details of those methods are available in the MATES

V final report available at <https://www.aqmd.gov/mates5> and the 2022 AQMP available at <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>. Refer to Appendix III and V for details of emissions processing and regional modeling, respectively. For MATES V, South Coast AQMD staff used a modeling system based on CAMx with RTRAC algorithm and WRF and an internally developed emission processing system. The 2022 AQMP employed the Community Multiscale Air Quality Modeling System (CMAQ), WRF, and emission processing using SMOKE.

It is desirable for the contractor to use a modeling system similar to the one South Coast AQMD staff will use for MATES VI or for the contractor to collaborate with South Coast AQMD staff to conduct some of the modeling-related activities. The contractor should provide BWP and TRWP emissions and input data developed in this study such that South Coast AQMD staff can use it independently to determine temporal trends of exposure and risk. The emissions and other needed input data should be ready to use in the South Coast AQMD's modeling platform.

The proposer must attend at least one required bidder's conference out of the two that are scheduled. The purpose of the bidders conference is for proposers and South Coast AQMD staff to clarify the scope of work and specific sampling, measurement, modeling, and analysis support that South Coast AQMD will conduct in parallel with this study. For example, the proposers can receive feedback on station locations, available space and power within monitoring shelters, the use of proposed monitoring equipment by South Coast AQMD staff, and specific modeling-related activities that South Coast AQMD staff will conduct.

The proposer should determine whether the proposed use of South Coast AQMD resources is feasible by communicating with South Coast AQMD staff in the mandatory bidder's conference or by submitting written questions to the project officer (see Section II below). South Coast AQMD will publish questions received in the bidder's conference or submitted to the project officer before March 25th, 2024 along with the South Coast AQMD response to the questions on the MATES VI website at www.aqmd.gov/mates6. South Coast AQMD will publish all responses by March 29th, 2024.

If the proposer is requesting South Coast AQMD support for sampling or measurements, or other types of atmospheric measurement related support such as use of South Coast AQMD monitoring stations, the proposer must submit to the project officer a list specifying the South Coast AQMD support that the proposer is requesting by April 2nd, 2024 at 2:00 PM PDT, one month before the RFP due date. The proposer must obtain a letter of support from the Deputy Executive Officer of the Monitoring and Analysis Division that specifies the support that South Coast AQMD staff will provide to the proposer before submitting their proposal. The submitted proposal must also describe specifically what South Coast AQMD support is required for each proposed task, and this support should be consistent with the letter of support.

If the proposer is requesting South Coast AQMD support for modeling-related activities such as processing of emissions data or calculating exposure estimates using the South Coast AQMD modeling platform, then the proposer should submit to the project officer a list of the South Coast AQMD support that the proposer is requesting by April 2nd, 2024

at 2:00 PM PDT, one month before the RFP due date. The proposer must obtain a letter of support from the Deputy Executive Officer of the South Coast AQMD Planning, Rule Development and Implementation Division that specifies the support that South Coast AQMD staff will provide to the proposer before submitting their proposal. The submitted proposal must also describe specifically what South Coast AQMD support is required for each proposed task, and this support should be consistent with the letter of support.

References

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SECTION II: CONTACT PERSON

Questions regarding the content or intent of this RFP or on procedural matters should be addressed to the project officer:

Contact's Name: Nico Schulte, Ph.D.
Air Quality Specialist
Phone: (909) 396 - 2349

email: nschulte@aqmd.gov

South Coast AQMD
 21865 Copley Drive
 Diamond Bar, CA 91765-4178

SECTION III: SCHEDULE OF EVENTS

DATE	EVENT
February 2, 2024	RFP Released
March 8, 2024	Bidders conference 1 (virtual) Held from 1:00 p.m. to 3:00 p.m. PST
March 13, 2024	Bidders conference 2 (virtual) Held from 8:00 a.m. to 10:00 a.m. PDT
May 25, 2024	Last day to submit questions to the project officer
March 29, 2024	Responses to questions published by this date
April 2, 2024	Requests for support due to South Coast AQMD no later than 2:00 p.m. PDT
May 2, 2024	Proposals Due to South Coast AQMD - No Later Than 2:00 p.m. PDT
May 2, 2024 – May 24, 2024	Proposal Evaluations
May 24, 2024	Interviews, if required*
June 14, 2024	Administrative Committee of the Board
August 2, 2024	Governing Board selection of contractor
August 16, 2024	Anticipated Contract Execution

*The interview is only for clarification by the proposer of information in the proposal, if necessary

Attending at least one of the two bidder’s conferences is a requirement for proposer’s submissions to be considered.

SECTION IV: PARTICIPATION IN THE PROCUREMENT PROCESS

It is the policy of South Coast AQMD to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in South Coast AQMD contracts. Attachment A to this RFP contains definitions and further information.

SECTION V: STATEMENT OF WORK/SCHEDULE OF DELIVERABLES

A. Statement of Work

The contractor will conduct work in coordination with South Coast AQMD staff and the MATES VI study to accomplish these objectives:

Objective 1: Estimate outdoor concentrations due to BWP and TRWP emissions from on-road vehicles and roadways at a 2 km grid over the South Coast Air Basin and the Coachella Valley during MATES VI. The BWP and TRWP concentrations must be estimated using appropriate methods so that the following requirements are achieved.

- The BWP and TRWP should be representative of long-term exposure concentrations relevant for determining cancer and non-cancer health risks (approximately annual duration).
- BWP and TRWP are emitted through primary emissions processes and also resuspended after depositing on the road. The estimated BWP and TRWP may represent the combination, primary+resuspended, or they may represent both the primary and resuspended separately so that the total can be determined by combining the primary and resuspended estimates.
- The proposal must state how it would distinguish BWP and TRWP estimates from interfering sources such as other road dust, exhaust emissions, stationary source emissions, and other emissions.
- The BWP and TRWP estimates must be determined using methods that could be repeated in future years to estimate trends of BWP and TRWP exposures in future MATES campaigns if desired by the South Coast AQMD.

The contractor's technical proposal must address the following tasks. The technical proposal must discuss the proposed methods with sufficient detail to evaluate whether the methods can meet objective 1 listed above and whether the methods are compatible with the MATES VI campaign plan and timeline.

Task 1. Present the technical proposal's study design to the MATES VI technical advisory group.

The contractor shall present the technical proposal study design at a MATES VI Technical Advisory Group meeting in person or remotely through Zoom. In-person attendance of the meeting is optional. The purpose of the meeting shall be to inform the Technical Advisory Group about the study design and to solicit feedback on the study design or implementation.

Task 1 should be completed within two months from contract signing.

Task 2. Literature review to identify pollutants in BWP and TRWP.

The contractor will conduct a review of known substances or pollutants that may be emitted as part of BWP or TRWP based on existing literature (scientific research, manufacturer data, EPA/CARB emissions data, other government agency data on health risks, and any other data as appropriate). The contractor will compile a database of substances based on the literature review and compare the database with the list of substances for which OEHHA has published cancer

potency factors or reference exposure levels. The contractor will identify the substances identified in the literature review that do not have associated OEHHA cancer potency factors or reference exposure levels.

Task 2 shall be completed within six calendar months from contract signing.

Schedule of Deliverables for task 2:

- A report of the findings of the literature review, including a list of substances, whether OEHHA has published cancer potency factors or reference exposure levels for each substance, and other data developed in task 2 along with a written progress report after completing task 2.

Task 3. Develop method to estimate exposures to BWP and TRWP.

The contractor will design a measurement, modeling, and analysis method to quantify the outdoor concentration of pollutants in BWP and TRWP. The concentrations quantified shall be used to determine exposure concentrations for the MATES VI campaign period (approximately annual average concentrations). The method must quantify the total PM10 BWP and PM10 TRWP mass concentrations and should at a minimum quantify the concentrations of substances identified in task 2 that have associated OEHHA cancer potency factors or reference exposure levels. The method should be designed to reduce uncertainties of BWP PM10 and TRWP PM10 estimates relative to past efforts in the South Coast AQMD region. The method should not rely only on model calculations because the BWP and TRWP emission estimates used in models may have large uncertainties.

The method developed in this task should be designed to meet the following requirements:

- must be applicable over the South Coast Air Basin and Coachella Valley
- must produce exposure concentration estimates with a spatial resolution sufficient to resolve hot spots due to emissions from on-road vehicles and roads and to determine spatial trends in exposure (approximately 2 km resolution)
- must be useful for estimating future risk trends if data is collected in a subsequent study
- must produce exposure concentration estimates that are representative of the emissions from on-road vehicles and roads present throughout the South Coast Air Basin and Coachella Valley

It is anticipated that both measurements and regional modeling are required to estimate exposure concentrations at approximately 2 km resolution throughout the South Coast Air Basin and Coachella Valley. South Coast AQMD staff plans to

conduct regional modeling with methods similar to those used for MATES V or the 2022 AQMP. Details of those methods are available in the MATES V final report available at <https://www.aqmd.gov/mates5> and the 2022 AQMP available at <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>. It is desirable for the contractor to use a modeling system similar to the one South Coast AQMD staff will use for MATES VI or for the contractor to collaborate with South Coast AQMD staff to conduct some of the modeling-related activities. The contractor should provide BWP and TRWP emissions and input data such that South Coast AQMD staff can use it independently to determine temporal trends of exposure and risk. The emissions and other needed input data should be ready to use in the South Coast AQMD's modeling platform.

The contractor shall develop measurement and modeling project plans as applicable. The project plan shall describe the sampling, measurements, modeling, and analysis methods developed in this task. The project plan should include a sampling and measurement schedule or test matrix as appropriate that describes what sampling and measurements will be conducted. The project plan should describe how the measurements and modeling will be used to obtain data that is representative of the influence of vehicle fleet, traffic and driving conditions, and road surface conditions on the exposure estimates.

The project plans should include an evaluation of the uncertainty and representativeness of the exposure estimates, or other evaluation metrics as determined by the contractor. Targets for the evaluation metrics should be developed by the contractor. The performance targets for measurements should include or be roughly equivalent to the following:

- The upper and lower bounds of the 95% confidence interval of the annual mean of measurements are between 70% - 130% of the annual mean
- Limits for data quality indicators used for quality control of measurement data, such as for assessment of precision and accuracy, should be within $\pm 30\%$ of the typical measured concentration or other relevant concentration level, as applicable

Similar metrics should be developed for model evaluations based on RMSE, mean bias, and other performance metrics as applicable.

The contractor shall develop a quality assurance project plan and include it as part of the project plan. The plan should include but is not limited to details of the sampling, analysis, and measurement methods and sampling design, sampling and analysis instruments used, sampling schedule, quality objectives and criteria, standard operating procedures, quality control requirements, equipment testing and maintenance, calibration, and data management.

The contractor shall obtain any necessary permission or permits to conduct sampling at locations that are not operated by the South Coast AQMD as required by the project plan.

Task 3 shall be completed within six calendar months from contract signing.

Schedule of Deliverables for task 3:

- The measurement and modeling project plan and quality assurance project plan developed in task 3.
- Documentation showing that the contractor has obtained permission or permits for sampling at locations that are not operated by the South Coast AQMD as needed by the project plan.

Task 4. Conduct measurement, modeling, and analysis needed for objective 1, and estimate BWP and TRWP exposure for MATES VI.

The contractor will conduct measurements, modeling, and analysis necessary to implement the methods designed in task 3 to estimate exposure in MATES VI. This task should be conducted in coordination with South Coast AQMD staff and the MATES VI measurement and modeling phases.

As allowed by the MATES measurement, modeling, and analysis plan, South Coast AQMD staff can support sampling, measurement, modeling, and analysis for task 4. The contractor should work with South Coast AQMD staff to plan this staff support. The contractor must follow the required steps outlined in section I and VII including discussion with South Coast AQMD staff and obtaining letter(s) of support prior to submitting the proposal in order to receive support from South Coast AQMD. The contractor should coordinate with South Coast AQMD staff during activities conducted for this task and should communicate all routine and non-routine needs to South Coast AQMD staff as early as possible.

All of task 4 shall be completed within thirty calendar months from contract signing.

Schedule of Deliverables for task 4:

- Task 4 shall be completed in coordination with the measurements, modeling, and analysis study plan for the MATES VI campaign.
- The contractor shall deliver a written progress report on activities for task 4 within 18 calendar months from contract signing.
- The contractor shall deliver the exposure estimates developed in task 4, along with a second written progress report within 30 calendar months from contract signing.
- The contractor shall deliver all emissions data used or developed in the tasks above to South Coast AQMD staff upon completion of task 4.

Task 5. Transfer data and prepare draft final report.

The contractor shall transfer all data and its derivatives used and or developed in tasks above, including relevant documentation, to the South Coast AQMD.

Task 5 shall be completed within 39 calendar months from contract signing.

Schedule of Deliverables for task 5:

- The contractor shall transfer all data and its derivatives used and or developed in tasks above, including relevant documentation, to the South Coast AQMD.
- The contractor shall deliver a draft final report.
- The contractor shall present draft project results to South Coast AQMD staff remotely via a Zoom presentation.

Task 6. Presentation, technical report, and study publication.

Before the project is finalized, the contractor shall hold a seminar via Zoom or in-person to South Coast AQMD staff. After the project is finalized, the contractor shall deliver a presentation to audiences with academic and non-academic backgrounds at a MATES VI Technical Advisory Group meeting, a South Coast AQMD governing board meeting and/or a South Coast AQMD governing board committee meeting. The contractor shall also submit a final report for inclusion in the MATES VI report. The contractor is encouraged to publish the study results in peer-reviewed technical journals or technical conference proceedings, subjected to co-authorship, or customary acknowledgement and disclaimers.

Task 6 shall be completed within 42 calendar months from contract signing.

Schedule of Deliverables for task 6:

- The contractor shall deliver a final report.
- The contractor shall present final project results to South Coast AQMD staff remotely via Zoom.
- The contractor shall, upon request, provide a presentation in person or remotely via Zoom to communicate the research project results to the South Coast AQMD governing board, South Coast AQMD committee, and/or MATES Technical Advisory Group. In-person attendance of these meetings is optional.

- The contractor shall deliver all emissions data used or developed in this project to South Coast AQMD staff upon completion of the project.

B. Communication and approval of deliverables

The contractor should frequently communicate with South Coast AQMD staff during the study, especially during the preparation for the full-scale study during the MATES VI measurement phase.

Written progress reports should include the accomplishments, task deliverables, a list of journal or conference papers submitted by the contractor based on data generated as part of this study, challenges encountered, any major changes to study plans and the reason for them, and tasks completed up to that point in the project.

All deliverables are subject to South Coast AQMD staff's review and approval before a task is deemed completed.

C. Required letter of support

In order for South Coast AQMD to support the sampling, measurements, analysis, and modeling work for the above tasks, the contractor must have obtained letter(s) of support from the Deputy Executive Officer of the Monitoring and Analysis Division for monitoring support and the Deputy Executive Officer of the South Coast AQMD Planning, Rule Development and Implementation Division for modeling support that specify the support that South Coast AQMD staff will provide to the contractor.

SECTION VI: REQUIRED QUALIFICATIONS

- A. Persons or firms proposing to bid on this proposal must be qualified and experienced in air pollution science, including atmospheric physics, pollution emission modeling, measurement of particle concentrations, air toxic measurements, and knowledge of brake emissions and tire and road emissions. Desirable experience also includes regional chemical transport modeling, dispersion modeling, health risk assessment, source apportionment, inverse modeling, flux measurement, and other experience useful in determining BWP and TRWP concentrations or emissions in real-world conditions. Proposals submitted to the South Coast AQMD must include a statement of the contractor's general qualifications demonstrating the contractor's ability to fulfill the requirements of this RFP. The proposal should demonstrate the following:
1. As needed by the proposed work, demonstrated knowledge and experience in measurement/interpretation of toxic air contaminant and other pollutant concentrations, measurement/interpretation of toxic air contaminant emissions, and modeling of toxic air contaminant concentrations.
 2. As needed by the proposed work, demonstrated knowledge and experience in interpreting toxic air contaminant measurement and model data for analyzing health risks, such as for exposure assessment.

To illustrate the contractor's experience regarding the qualifications listed above, the proposal should include a list of projects, publications in peer-reviewed journals, and presentations at national or international conferences that are relevant to the items listed above. The contractor should provide a list of the required qualifications and be prepared to provide a copy of the work upon request.

B. Proposer must submit the following:

1. Curriculum vitae or similar statement of qualifications of person or persons who may be designated as principal investigator (PI) and all other involved staff.
2. List of related work experiences that were presented at major international or national conferences or published in leading academic journals.
3. Summary of Proposer's general qualifications to meet required qualifications and fulfill statement of work, including additional personnel and resources beyond those of the PIs.
4. Short and concise summary of projects conducted by the proposer during the last five years. The projects should be relevant to the scope of this RFP.

SECTION VII: PROPOSAL SUBMITTAL REQUIREMENTS

Submitted proposals must follow the format outlined below and all requested information must be supplied. Failure to submit proposals in the required format will result in elimination from proposal evaluation. South Coast AQMD may modify the RFP or issue supplementary information or guidelines during the proposal preparation period prior to the due date. Please check our website for updates (<http://www.aqmd.gov/grants-bids>). The cost for developing the proposal is the responsibility of the Contractor and shall not be chargeable to South Coast AQMD.

Each proposal must be submitted in three separate volumes:

- Volume I - Technical Proposal
- Volume II - Cost Proposal
- Volume III - Certifications and Representations included in Attachment B to this RFP, must be completed and executed by an authorized official of the Contractor.

A separate cover letter, including the name, address, and telephone number of the contractor, and signed by the person or persons authorized to represent the Firm should accompany the proposal submission. Firm contact information as follows should also be included in the cover letter:

- Address and telephone number of office in, or nearest to, Diamond Bar, California.
- Name and title of Firm's representative designated as contact.

A separate Table of Contents should be provided for Volumes I and II.

VOLUME I – TECHNICAL PROPOSAL

DO NOT INCLUDE ANY COST INFORMATION IN THE TECHNICAL VOLUME

Summary (Section A) - State overall approach to meeting the objectives and satisfying the scope of work to be performed, the sequence of activities, and a description of methodology or techniques to be used.

Program Schedule (Section B) - Provide projected milestones or benchmarks for completing the project (to include reports) within the total time allowed.

Project Organization (Section C) - Describe the proposed management structure, program monitoring procedures, and organization of the proposed team. Provide a statement detailing your approach to the project, specifically address the Firm's ability and willingness to commit and maintain staffing to successfully complete the project on the proposed schedule. State what South Coast AQMD support is requested for each task of the proposal. The South Coast AQMD support must be determined prior to submitting the proposal as described in section I. Include letters of support for sampling and measurements or modeling as applicable in the technical proposal.

Qualifications (Section D) - Describe the technical capabilities of the Firm. Provide references of other similar studies or projects performed during the last five years demonstrating ability to successfully complete the work. Include contact name, title, email address and telephone number for any references listed. Provide a statement of your Firm's background and related experience in performing similar services for other governmental organizations.

Assigned Personnel (Section E) - Provide the following information about the staff to be assigned to this project:

1. List all key personnel assigned to the project by level, name, and location. Provide a curriculum vitae or similar statement describing the background, qualifications and experience of the lead person and all persons assigned to the project. Substitution of project manager or lead personnel will not be permitted without prior written approval of South Coast AQMD. Additional personnel may be assigned to the project. If additional personnel are assigned, South Coast AQMD should be notified.
2. Provide a spreadsheet of the labor hours proposed for each labor category at the task level.
3. Provide a statement indicating whether or not 90% of the work will be performed within the geographical boundaries of South Coast AQMD.

Subcontractors (Section F) - This project may require expertise in multiple technical areas. List any subcontractors that will be used, identifying functions to be performed by them, their related qualifications and experience and the total number of hours or percentage of time they will spend on the project.

Conflict of Interest (Section G) - Address possible conflicts of interest with other clients affected by actions performed by the Firm on behalf of South Coast AQMD. South Coast AQMD recognizes that prospective Contractors may be performing similar projects for other clients. Include a complete list of such clients for the past three (3) years with the type of work performed and the total number of years performing such tasks for each client. Although the Proposer will not be automatically disqualified by reason of work performed for such clients, South Coast AQMD reserves the right to consider the nature and extent of such work in evaluating the proposal.

Additional Data (Section H) - Provide other essential data that may assist in the evaluation of this proposal.

VOLUME II - COST PROPOSAL

Name and Address - The Cost Proposal must list the name and complete address of the Proposer in the upper left-hand corner.

Cost Proposal – South Coast AQMD anticipates awarding a fixed price contract. Cost information must be provided as listed below

1. Detail must be provided by the following categories:
 - A. Labor – The Cost Proposal must list the fully-burdened hourly rates and the total number of hours estimated for each level of professional and administrative staff to be used to perform the tasks required by this RFP. Costs should be estimated for each of the components of the work plan.
 - B. Subcontractor Costs - List subcontractor costs and identify subcontractors by name. Itemize subcontractor charges per hour or per day.
 - C. Travel Costs - Indicate amount of travel cost and basis of estimate to include trip destination, purpose of trip, length of trip, airline fare or mileage expense, per diem costs, lodging and car rental.
 - D. Other Direct Costs -This category may include such items as postage and mailing expense, printing and reproduction costs, etc. Provide a basis of estimate for these costs.
2. It is the policy of the South Coast AQMD to receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services. South Coast AQMD will give preference, where appropriate, to vendors who certify that they will provide “most favored customer” status to the South Coast AQMD. To receive preference points, Proposer shall certify that South Coast AQMD is receiving “most favored customer” pricing in the Business Status Certifications page of Volume III, Attachment B – Certifications and Representations.

VOLUME III - CERTIFICATIONS AND REPRESENTATIONS

(see Attachment B to this RFP)

SECTION VIII: PROPOSAL SUBMISSION

All proposals must be submitted according to specifications set forth in the section above, and this section. Failure to adhere to these specifications may be cause for rejection of the proposal.

Signature - All proposals must be signed by an authorized representative of the Proposer. Electronic signatures are acceptable.

Due Date - All proposals are due no later than **2:00 p.m. PDT, May 2, 2024** and should be directed to:

Procurement Unit
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178
Phone: (909) 396-3520

Submittal - Submit four (4) complete copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the Proposer and the words "Request for Proposals P2024-09."

Late bids/proposals will not be accepted under any circumstances.

Grounds for Rejection - A proposal may be immediately rejected if:

- It is not prepared in the format described, or
- It is signed by an individual not authorized to represent the Firm.

Modification or Withdrawal - Once submitted, proposals cannot be altered without the prior written consent of South Coast AQMD. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals.

SECTION IX: PROPOSAL EVALUATION/CONTRACTOR SELECTION CRITERIA

- A. Proposals will be evaluated by a panel of three to five South Coast AQMD staff members familiar with the subject matter of the project. The panel shall be appointed by the Executive Officer or his designee. In addition, the evaluation panel may include such outside public sector or academic community expertise as deemed desirable by the Executive Officer. The panel will make a recommendation to the Executive Officer and/or the Governing Board of South Coast AQMD for final selection of a contractor and negotiation of a contract.
- B. Each member of the evaluation panel shall be accorded equal weight in his or her rating of proposals. The evaluation panel members shall evaluate the proposals according to the specified criteria and numerical weightings set forth below.

1. Proposal Evaluation Criteria

Criteria	Points
Expected benefit of the proposed work to South Coast AQMD	20
Technical/Management Approach and Methods	40
Contractor Qualifications	20
Previous Experience on Similar Projects	10
Cost	10

TOTAL 100

Additional Points

Small Business or Small Business Joint Venture	10
DVBE or DVBE Joint Venture	10
Use of DVBE or Small Business Subcontractors	7
Zero or Near-Zero Emission Vehicle Business	5
Local Business (Non-Federally Funded Projects Only)	5
Off-Peak Hours Delivery Business	2
Most Favored Customer	2

The cumulative points awarded for small business, Disabled veteran business enterprise (DVBE), use of small business or DVBE subcontractors, Zero or Near-Zero emission vehicle business, local business, and off-peak hours delivery business shall not exceed 15 points. Most Favored Customer status incentive points shall be added, as applicable for a total of 17 points.

Self-Certification for Additional Points

The award of these additional points shall be contingent upon Proposer completing the Self-Certification section of Attachment B – Certifications and Representations and/or inclusion of a statement in the proposal self-certifying that Proposer qualifies for additional points as detailed above.

2. To receive additional points in the evaluation process for the categories of Small Business or Small Business Joint Venture, DVBE or DVBE Joint Venture or Local Business (for non-federally funded projects), the Proposer must submit a self-certification at the time of proposal submission certifying that the Proposer meets the requirements set forth in Attachments A and B. To receive points for the use of DVBE and/or Small Business subcontractors, at least 25 percent of the total contract value must be subcontracted to DVBEs and/or Small Businesses. To receive points as a Zero or Near-Zero Emission Vehicle Business, the Proposer must demonstrate to the Executive Officer, or designee, that supplies and materials delivered to South Coast AQMD are delivered in vehicles that operate on clean-fuels. To receive points as a Local Business, the Proposer must affirm that it has an ongoing business within the South Coast AQMD at the time of bid/proposal submittal and that 90% of the work related to the contract will be performed within the South Coast AQMD. Proposals for legislative representation, such as in Sacramento, California or Washington D.C. are not eligible for local business incentive points. Federally funded projects are not eligible for local business incentive points. To receive points as an Off-Peak Hours Delivery Business, the proposer must submit, at proposal submission, certification of its commitment to delivering supplies and materials to South Coast AQMD between the hours of 10:00 a.m. and 3:00 p.m. To receive points for Most Favored Customer status, the Proposer must submit, at proposal submission, certification of its commitment to provide most favored customer status to the South Coast AQMD. The cumulative points awarded for Small Business, DVBE, use of Small Business or DVBE Subcontractors, Local Business, Zero or Near- Zero Emission Vehicle Business, Off-Peak Hour Delivery Business and Most Favored Customer shall not exceed 17 points.
3. For procurement of Research and Development (R & D) projects or projects requiring technical or scientific expertise or special projects requiring unique knowledge and abilities, technical factors including past experience shall be weighted at 90 points and cost shall be weighted at 10 points. A proposal must receive at least 72 out of 90 technical factor points on R & D projects and projects requiring technical or scientific expertise or special projects requiring unique knowledge and abilities, in order to be deemed qualified for award.
4. The lowest cost proposal will be awarded the maximum cost points available and all other cost proposals will receive points on a prorated basis. For example, if the lowest cost proposal is \$1,000 and the maximum points available are 10 points, this proposal would receive the full 10 points. If the next lowest cost proposal is \$1,100 it would receive 9 points reflecting the fact that it is 10% higher than the lowest cost (90% of 10 points = 9 points).

- C. During the selection process the evaluation panel may wish to ask additional questions of some proposers for clarification purposes only. No new material will be permitted at this time. Additional information provided during the bid review process is limited to clarification by the Proposer of information presented in his/her proposal, upon request by South Coast AQMD.
- D. The Executive Officer or Governing Board may award the contract to a Proposer, other than the Proposer receiving the highest rating, in the event the Governing Board determines that another Proposer from among those technically qualified would provide the best value to South Coast AQMD considering cost and technical factors. The determination shall be based solely on the Evaluation Criteria contained in the Request for Proposal (RFP), on the evidence provided in the proposal and on any other evidence provided during the bid review process.
- E. Selection will be made based on the above-described criteria and rating factors. The selection will be made by and is subject to Executive Officer or Governing Board approval. Proposers may be notified of the results by email.
- F. The Governing Board has approved a Bid Protest Procedure, which provides a process for a Bidder or prospective Bidder to submit a written protest to the South Coast AQMD Procurement Manager in recognition of two types of protests: Protest Regarding Solicitation and Protest Regarding Award of a Contract. Copies of the Bid Protest Policy can be secured through a request to the South Coast AQMD Procurement Department.
- G. The Executive Officer or Governing Board may award contracts to more than one Proposer if, in (his or their) sole judgment, the purposes of the contract or award would best be served by selecting multiple proposers.
- H. If additional funds become available, the Executive Officer or Governing Board may increase the amount awarded. The Executive Officer or Governing Board may also select additional proposers for a grant or contract if additional funds become available.
- I. Disposition of Proposals – Pursuant to South Coast AQMD’s Procurement Policy and Procedure, South Coast AQMD reserves the right to reject any or all proposals. All proposals become the property of South Coast AQMD and are subject to the California Public Records Act. One copy of the proposal shall be retained for South Coast AQMD files. Additional copies and materials will be returned only if requested and at the proposer’s expense.

SECTION X: FUNDING

The total funding for the work contemplated by this RFP will be a maximum **\$850,000**. There is no contribution from federal sources and so section G of Attachment A and other provisions related to federal funding sources do not apply to this RFP.

SECTION XI: SAMPLE CONTRACT

A sample contract to carry out the work described in this RFP is available on South Coast AQMD's website at <http://www.aqmd.gov/grants-bids> or upon request from the RFP Contact Person (Section II).

ATTACHMENT A

PARTICIPATION IN THE PROCUREMENT PROCESS

A. It is the policy of South Coast Air Quality Management District (South Coast AQMD) to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in South Coast AQMD contracts.

B. Definitions:

The definition of minority, women or disadvantaged business enterprises set forth below is included for purposes of determining compliance with the affirmative steps requirement described in Paragraph G below on procurements funded in whole or in part with federal grant funds which involve the use of subcontractors. The definition provided for disabled veteran business enterprise, local business, small business enterprise, Zero or Near-Zero emission vehicle business and off-peak hours delivery business are provided for purposes of determining eligibility for point or cost considerations in the evaluation process.

1. "Women business enterprise" (WBE) as used in this policy means a business enterprise that meets all of the following criteria:
 - a. a business that is at least 51 percent (51%) owned by one or more women, or in the case of any business whose stock is publicly held, at least 51 percent (51%) of the stock is owned by one or more or women.
 - b. a business whose management and daily business operations are controlled by one or more women.
 - c. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
2. "Disabled veteran" as used in this policy is a United States military, naval, or air service veteran with at least 10 percent (10%) service-connected disability who is a resident of California.
3. "Disabled veteran business enterprise" (DVBE) as used in this policy means a business enterprise that meets all the following criteria:
 - a. is a sole proprietorship or partnership of which at least 51 percent (51%) is owned by one or more disabled veterans or, in the case of a publicly owned business, at least 51 percent (51%) of its stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent (51%) of the voting stock of the parent corporation

- is owned by one or more disabled veterans; or a joint venture in which at least 51 percent (51%) of the joint venture's management and control and earnings are held by one or more disabled veterans.
- b. the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
 - c. is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.
4. "Local business" as used in this policy means a company that has an ongoing business within geographical boundaries of South Coast AQMD at the time of bid or proposal submittal and performs 90 percent (90%) of the work related to the contract within the geographical boundaries of South Coast AQMD and satisfies the requirements of subparagraph H below. Proposals for legislative representation, such as in Sacramento, California or Washington D.C. are not eligible for local business incentive points.
 5. "Small business" as used in this policy means a business that meets the following criteria:
 - a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
 - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
 - A manufacturer with 100 or fewer employees.
 - b. "Manufacturer" means a business that is both of the following:
 - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
 - 2) Classified between Codes 311000 and 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.
 6. "Joint ventures" as defined in this policy pertaining to certification means that one party to the joint venture is a DVBE or small business and owns at least 51 percent (51%) of the joint venture.
 7. "Zero or Near-Zero Emission Vehicle Business" as used in this policy means a company or contractor that uses Zero or Near-Zero emission vehicles in conducting deliveries to South Coast AQMD. Zero or Near-Zero emission vehicles

include vehicles powered by electric, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), ethanol, methanol and hydrogen and are certified to 90 percent (90%) or lower of the existing standard.

8. "Off-Peak Hours Delivery Business" as used in this policy means a company or contractor that commits to conducting deliveries to South Coast AQMD during off-peak traffic hours defined as between 10:00 a.m. and 3:00 p.m.
9. "Benefits Incentive Business" as used in this policy means a company or contractor that provides janitorial, security guard or landscaping services to South Coast AQMD and commits to providing employee health benefits (as defined below in Section VIII.D.2.d) for full time workers with affordable deductible and co-payment terms.
10. "Minority Business Enterprise" as used in this policy means a business that is at least 51 percent (10%) owned by one or more minority person(s), or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more or minority persons.
 - a. a business whose management and daily business operations are controlled by one or more minority persons.
 - b. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
 - c. "Minority person" for purposes of this policy, means a Black American, Hispanic American, Native-American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian (including a person whose origins are from India, Pakistan, and Bangladesh), Asian-Pacific-American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, and Taiwan).
11. "Most Favored Customer" as used in this policy means that the South Coast AQMD will receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services.
12. "Disadvantaged Business Enterprise" as used in this policy means a business that is an entity owned and/or controlled by a socially and economically disadvantaged individual(s) as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note) (10% statute), and Public Law 102-389 (42 U.S.C. 4370d)(8% statute), respectively:
 - a Small Business Enterprise (SBE);
 - a Small Business in a Rural Area (SBRA);
 - a Labor Surplus Area Firm (LSAF); or

- a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program.
- C. Under Request for Quotations (RFQ), DVBEs, DVBE business joint ventures, small businesses, and small business joint ventures shall be granted a preference in an amount equal to 5 percent (5%) of the lowest cost responsive bid. Zero or Near-Zero Emission Vehicle Businesses shall be granted a preference in an amount equal to 5 percent of the lowest cost responsive bid. Off-Peak Hours Delivery Businesses shall be granted a preference in an amount equal to 2 percent (2%) of the lowest cost responsive bid. Local businesses (if the procurement is not funded in whole or in part by federal grant funds) shall be granted a preference in an amount equal to 2 percent (2%) of the lowest cost responsive bid. Businesses offering Most Favored Customer status shall be granted a preference in an amount equal to 2 percent (2%) of the lowest cost responsive bid.
- D. Under Request for Proposals, DVBEs, DVBE joint ventures, small businesses, and small business joint ventures shall be awarded ten (10) points in the evaluation process. A non-DVBE or large business shall receive seven (7) points for subcontracting at least 25 percent (25%) of the total contract value to a DVBE and/or small business. Zero or Near-Zero Emission Vehicle Businesses shall be awarded five (5) points in the evaluation process. On procurements which are not funded in whole or in part by federal grant funds local businesses shall receive five (5) points. Off-Peak Hours Delivery Businesses shall be awarded two (2) points in the evaluation process. Businesses offering Most Favored Customer status shall be awarded two (2) points in the evaluation process.
- E. South Coast AQMD will ensure that discrimination in the award and performance of contracts does not occur on the basis of race, color, sex, national origin, marital status, sexual preference, creed, ancestry, medical condition, or retaliation for having filed a discrimination complaint in the performance of South Coast AQMD contractual obligations.
- F. South Coast AQMD requires Contractor to be in compliance with all state and federal laws and regulations with respect to its employees throughout the term of any awarded contract, including state minimum wage laws and OSHA requirements.
- G. When contracts are funded in whole or in part by federal funds, and if subcontracts are to be let, the Contractor must comply with the following, evidencing a good faith effort to solicit disadvantaged businesses. Contractor shall submit a certification signed by an authorized official affirming its status as a MBE or WBE, as applicable, at the time of contract execution. South Coast AQMD reserves the right to request documentation demonstrating compliance with the following good faith efforts prior to contract execution.
1. Ensure Disadvantaged Business Enterprises (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local Government recipients,

this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.

2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
 3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and Local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
 4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
 5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
 6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.
- H. To the extent that any conflict exists between this policy and any requirements imposed by federal and state law relating to participation in a contract by a certified MBE/WBE/DVBE as a condition of receipt of federal or state funds, the federal or state requirements shall prevail.
- I. When contracts are not funded in whole or in part by federal grant funds, a local business preference will be awarded. For such contracts that involve the purchase of commercial off-the-shelf products, local business preference will be given to suppliers or distributors of commercial off-the-shelf products who maintain an ongoing business within the geographical boundaries of South Coast AQMD. However, if the subject matter of the RFP or RFQ calls for the fabrication or manufacture of custom products, only companies performing 90 percent (90%) of the manufacturing or fabrication effort within the geographical boundaries of South Coast AQMD shall be entitled to the local business preference. Proposals for legislative representation, such as in Sacramento, California or Washington D.C. are not eligible for local business incentive points.
- J. In compliance with federal fair share requirements set forth in 40 CFR Part 33, South Coast AQMD shall establish a fair share goal annually for expenditures with federal funds covered by its procurement policy.

ATTACHMENT B

Certifications and Representations

**South Coast
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Business Information Request

Dear South Coast AQMD Contractor/Supplier:

South Coast Air Quality Management District (South Coast AQMD) is committed to ensuring that our contractor/supplier records are current and accurate. If your firm is selected for award of a purchase order or contract, it is imperative that the information requested herein be supplied in a timely manner to facilitate payment of invoices. In order to process your payments, we need the enclosed information regarding your account. **Please review and complete the information identified on the following pages, remember to sign all documents for our files, and return them as soon as possible to the address below:**

**Attention: Accounts Payable, Accounting Department
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178**

If you do not return this information, we will not be able to establish you as a vendor. This will delay any payments and would still necessitate your submittal of the enclosed information to our Accounting department before payment could be initiated. Completion of this document and enclosed forms would ensure that your payments are processed timely and accurately.

If you have any questions or need assistance in completing this information, please contact Accounting at (909) 396-3777. We appreciate your cooperation in completing this necessary information.

Sincerely,

Sujata Jain
Chief Financial Officer

DH:nd

Enclosures: Business Information Request
Disadvantaged Business Certification
W-9
Form 590 Withholding Exemption Certificate
Federal Contract Debarment Certification
Campaign Contributions Disclosure



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____

REMITTING ADDRESS INFORMATION

Address			
City/Town			
State/Province		Zip	
Phone	() - Ext	Fax	() -
Contact		Title	
E-mail Address			
Payment Name if Different			

All invoices must reference the corresponding Purchase Order Number(s)/Contract Number(s) if applicable and mailed to:

Attention: Accounts Payable, Accounting Department
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178

BUSINESS STATUS CERTIFICATIONS

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

Statements of certification:

As a prime contractor to South Coast AQMD, _____ (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

Self-Certification Verification: Also for use in awarding additional points, as applicable, in accordance with South Coast AQMD Procurement Policy and Procedure:

Check all that apply:

- | | |
|---|--|
| <input type="checkbox"/> Small Business Enterprise/Small Business Joint Venture | <input type="checkbox"/> Women-owned Business Enterprise |
| <input type="checkbox"/> Local business | <input type="checkbox"/> Disabled Veteran-owned Business Enterprise/DVBE Joint Venture |
| <input type="checkbox"/> Minority-owned Business Enterprise | <input type="checkbox"/> Most Favored Customer Pricing Certification |

Percent of ownership: _____ %

Name of Qualifying Owner(s): _____

State of California Public Works Contractor Registration No. _____ MUST BE INCLUDED IF BID PROPOSAL IS FOR PUBLIC WORKS PROJECT.

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

NAME

TITLE

TELEPHONE NUMBER

DATE

Definitions

Disabled Veteran-Owned Business Enterprise means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture’s management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

Joint Venture means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

Local Business means a business that meets all of the following criteria:

- has an ongoing business within the boundary of South Coast AQMD at the time of bid application.
- performs 90 percent of the work within South Coast AQMD’s jurisdiction.

Minority-Owned Business Enterprise means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

“Minority” person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

Small Business Enterprise means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
 - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
 - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
 - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
 - 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

Small Business Joint Venture means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that the Small Business will receive at least 51 percent of the project dollars.

Women-Owned Business Enterprise means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- is a business whose management and daily business operations are controlled or owned by one or more women.
- is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

Most Favored Customer as used in this policy means that the South Coast AQMD will receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services.

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

**Give Form to the
requester. Do not
send to the IRS.**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Print or type. See Specific Instructions on page 3.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
	<input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate	Exempt payee code (if any) _____
	<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.	Exemption from FATCA reporting code (if any) _____
	<input type="checkbox"/> Other (see instructions) ▶ _____	(Applies to accounts maintained outside the U.S.)
	5 Address (number, street, and apt. or suite no.) See instructions.	Requester's name and address (optional)
6 City, state, and ZIP code		
7 List account number(s) here (optional)		

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 40%; border: 1px solid black; height: 20px;"></td> </tr> </table>		-		-	
	-		-		
or					
Employer identification number					
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 5%; text-align: center;">-</td> <td style="width: 70%; border: 1px solid black; height: 20px;"></td> </tr> </table>		-			
	-				

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person ▶	Date ▶
------------------	----------------------------	--------

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
 - Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
 - Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
 - Form 1099-S (proceeds from real estate transactions)
 - Form 1099-K (merchant card and third party network transactions)
 - Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What Is FATCA Reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China Income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C corporation, or S corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a)
- 11—A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor [*]

For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

***Note:** The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/identitytheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

TAXABLE YEAR

CALIFORNIA FORM

2021 Withholding Exemption Certificate

590

The payee completes this form and submits it to the withholding agent. The withholding agent keeps this form with their records.

Withholding Agent Information

Name

Payee Information

Name

SSN or ITIN FEIN CA Corp no. CA SOS file no.

Address (apt./ste., room, PO box, or PMB no.)

City (If you have a foreign address, see instructions.)

State ZIP code

Exemption Reason

Check only one box.

By checking the appropriate box below, the payee certifies the reason for the exemption from the California income tax withholding requirements on payment(s) made to the entity or individual.

Individuals — Certification of Residency:

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.

Corporations:

The corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.

Partnerships or Limited Liability Companies (LLCs):

The partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

Tax-Exempt Entities:

The entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 (insert letter) or Internal Revenue Code Section 501(c) (insert number). If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit-Sharing Plans:

The entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

California Trusts:

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return. If the trustee or noncontingent beneficiary becomes a nonresident at any time, I will promptly notify the withholding agent.

Estates — Certification of Residency of Deceased Person:

I am the executor of the above-named person's estate or trust. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return.

Nonmilitary Spouse of a Military Servicemember:

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

CERTIFICATE OF PAYEE: Payee must complete and sign below.

To learn about your privacy rights, how we may use your information, and the consequences for not providing the requested information, go to ftb.ca.gov/forms and search for 1131. To request this notice by mail, call 800.852.5711.

Under penalties of perjury, I declare that I have examined the information on this form, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. I further declare under penalties of perjury that if the facts upon which this form are based change, I will promptly notify the withholding agent.

Type or print payee's name and title

Telephone

Payee's signature

Date

2021 Instructions for Form 590

Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

General Information

California Revenue and Taxation Code (R&TC) Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California. For more information, See General Information B, Income Subject to Withholding.

Registered Domestic Partners (RDPs) – For purposes of California income tax, references to a spouse, husband, or wife also refer to a California RDP unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding.

Form 590 does not apply to payments of backup withholding. For more information, go to ftb.ca.gov and search for **backup withholding**.

Form 590 does not apply to payments for wages to employees. Wage withholding is administered by the California Employment Development Department (EDD). For more information, go to edd.ca.gov or call 888.745.3886.

Do not use Form 590 to certify an exemption from withholding if you are a **seller of California real estate**. Sellers of California real estate use Form 593, Real Estate Withholding Statement, to claim an exemption from the real estate withholding requirement.

The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities.
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities.
- A foreign government or any of its political subdivisions, agencies, or instrumentalities.

B Income Subject to Withholding

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident partners, members, and S corporation shareholders and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business.
- Payments to nonresidents for royalties from activities sourced to California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Endorsement payments received for services performed in California.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding, get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication, see Additional Information.

C Who Certifies this Form

Form 590 is certified (completed and signed) by the payee. California residents or entities exempt from the withholding requirement should complete Form 590 and submit it to the withholding agent before payment is made. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless notified by the Franchise Tax Board (FTB) that the form should not be relied upon.

An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed exemption certificate, the withholding agent may accept a letter from the payee as a substitute explaining why they are not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee's taxpayer identification number (TIN).

The certification does not need to be renewed annually. The certification on Form 590 remains valid until the payee's status changes. The withholding agent must retain a copy of the certification or substitute for at least five years after the last payment to which the certification applies. The agent must provide it to the FTB upon request.

If an entertainer (or the entertainer's business entity) is paid for a performance, the entertainer's information must be provided. **Do not** submit the entertainer's agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes. Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled "Individuals — Certification of Residency."

D Definitions

For California nonwage withholding purposes:

- Nonresident includes all of the following:
 - Individuals who are not residents of California.
 - Corporations not qualified through the California Secretary of State (CA SOS) to do business in California or having no permanent place of business in California.
 - Partnerships or limited liability companies (LLCs) with no permanent place of business in California.
 - Any trust without a resident grantor, beneficiary, or trustee, or estates where the decedent was not a California resident.
- Foreign refers to non-U.S.

For more information about determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status. Military servicemembers have special rules for residency. For more information see General Information E, Military Spouse Residency Relief Act (MSRRA), and FTB Pub. 1032, Tax Information for Military Personnel.

Permanent Place of Business:

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or it has qualified through the CA SOS to transact intrastate business. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home.
- To which you intend to return whenever you are absent.

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

Specific Instructions

Payee Instructions

Enter the withholding agent's name.

Enter the payee's information, including the TIN and check the appropriate TIN box.

You must provide a valid TIN as requested on this form. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp no.); or CA SOS file number.

Private Mail Box (PMB) – Include the PMB in the address field. Write "PMB" first, then the box number. Example: 111 Main Street PMB 123.

Foreign Address – Follow the country's practice for entering the city, county, province, state, country, and postal code, as applicable, in the appropriate boxes. Do not abbreviate the country name.

Exemption Reason – Check the box that reflects the reason why the payee is exempt from the California income tax withholding requirement.

Withholding Agent Instructions

Do not send this form to the FTB. The certification on Form 590 remains valid until the payee's status changes. The withholding agent must retain a copy of the certificate or substitute for at least five years after the last payment to which the certificate applies. The agent must provide it to the FTB upon request.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

If any of these situations occur, then withholding may be required. For more information, get Form 592, Resident and Nonresident Withholding Statement, Form 592-B, Resident and Nonresident Withholding Tax Statement, [Form 592-PTE](#), Pass-Through Entity Annual Withholding Return, Form 592-Q, Payment Voucher for Pass-Through Entity Withholding, and Form 592-V, Payment Voucher for Resident or Nonresident Withholding.

Additional Information

Website: For more information, go to ftb.ca.gov and search for nonwage.

MyFTB offers secure online tax account information and services. For more information, go to ftb.ca.gov and login or register for **MyFTB**.

Telephone: 888.792.4900 or 916.845.4900, Withholding Services and Compliance phone service

Fax: 916.845.9512

Mail: WITHHOLDING SERVICES AND COMPLIANCE MS F 182
FRANCHISE TAX BOARD
PO BOX 942867
SACRAMENTO CA 94267-0651

For questions unrelated to withholding, or to download, view, and print California tax forms and publications, or to access the TTY/TDD numbers, see the Internet and Telephone Assistance section.

Internet and Telephone Assistance

Website: ftb.ca.gov

Telephone: 800.852.5711 from within the United States
916.845.6500 from outside the United States

TTY/TDD: 800.822.6268 for persons with hearing or speech disability
711 or 800.735.2929 California relay service

Asistencia Por Internet y Teléfono

Sitio web: ftb.ca.gov

Teléfono: 800.852.5711 dentro de los Estados Unidos
916.845.6500 fuera de los Estados Unidos

TTY/TDD: 800.822.6268 para personas con discapacidades auditivas o del habla
711 ó 800.735.2929 servicio de relevo de California

**Certification Regarding
Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them or commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statute or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Typed Name & Title of Authorized Representative

Signature of Authorized Representative Date

I am unable to certify to the above statements. My explanation is attached.



CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to South Coast Air Quality Management District (SCAQMD) Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b). Where a proposed rule or proposed amended rule impacts three or fewer facilities, those facilities will be treated in much the same manner as contracting parties and so must also complete this form, disclosing information relating to any campaign contributions made to any SCAQMD Board Members. See Quadri Advice Letter (2002) A-02.096.¹ In the event that a qualifying campaign contribution is made, the Board Member to whom it was made may be disqualified from participating in the actions involving that donor.

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor’s contract or permit. Gov’t Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, SCAQMD Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov’t Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website (www.aqmd.gov). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

SECTION I.

Contractor (Legal Name): _____

<input type="checkbox"/> DBA, Name _____, County Filed in _____
<input type="checkbox"/> Corporation, ID No. _____
<input type="checkbox"/> LLC/LLP, ID No. _____

List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:
(See definition below).

¹The information provided on this form does not, and is not intended to, constitute legal advice. To the extent that you may have questions regarding any case law, citations, or legal interpretations provided above please seek the guidance of your own independent counsel.

SECTION II.

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

Yes No **If YES, complete Section II below and then sign and date the form. If NO, sign and date below. Include this form with your submittal.**

Name of Contributor _____

Governing Board Member or MSRC Member/Alternate Amount of Contribution Date of Contribution

Name of Contributor _____

Governing Board Member or MSRC Member/Alternate Amount of Contribution Date of Contribution

Name of Contributor _____

Governing Board Member or MSRC Member/Alternate Amount of Contribution Date of Contribution

Name of Contributor _____

Governing Board Member or MSRC Member/Alternate Amount of Contribution Date of Contribution

I declare the foregoing disclosures to be true and correct.

By: _____

Title: _____

Date: _____

DEFINITIONS

Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)

- (1) Parent subsidiary. A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity. Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
 - (A) One business entity has a controlling ownership interest in the other business entity.
 - (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:
 - (i) The same person or substantially the same person owns and manages the two entities;
 - (ii) There are common or commingled funds or assets;
 - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;
 - (iv) There is otherwise a regular and close working relationship between the entities; or
 - (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.